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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/633,166 | 08/01/2003 | Osamu Ueda | 1232-5096 | 4594 |
| 27123 | 7590 | 07/03/2008 | | |
| MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101 | | | EXAMINER HENN, TIMOTHY J | |
| | | | ART UNIT 2622 | PAPER NUMBER |
| | | | NOTIFICATION DATE 07/03/2008 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com
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| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/633,166 | Applicant(s) UEDA ET AL. | |
| | Examiner Timothy J. Henn | Art Unit 2622 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12 February 2008 has been entered.

Response to Arguments

2. Applicant's arguments filed 12 February 2008 have been fully considered but they are not persuasive. The claims as currently written require different readout areas in accordance with a scaling factor (i.e. "in a case that a first scaling factor..." and "in a case that a second scaling factor..."). Applicant argues that Hirota and Nozaki do not disclose this limitation. The examiner notes that Hirota teaches at least two readout modes, a normal imaging mode in which the entire image sensor area is read out and a high-speed imaging mode in which a second smaller area is read out. Since the number of pixels in the second readout mode is less than the number of pixels in the first readout mode, fewer pixels in total are mixed (i.e. the claims as currently written require "mixing the plurality of light receiving elements less than the number of mixed pixels in the case of the first control mode", but does not necessarily require that the

number of pixels which are combined into a single pixel signal be less than the number of pixels which are combined into a single pixel signal of the first mode).

3. Nozaki discloses a combined optical and zoom mode. The zoom system of Nozaki reads out a full resolution image during an optical zoom operation (i.e. Figure 7, optical zoom area), and only requires a reduced resolution image during an electronic zoom operation (i.e. Figure 7, electronic zoom area). Since the scale factor is less during an optical zoom operation and greater during an electronic zoom operation of Nozaki, the combined system of Hirota in view of Nozaki meets the claim limitations as claimed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota et al. (US 2001/0043275) in view of Nozaki (US 7,046,290).

[claim 14]

Regarding claim 14, Hirota discloses an imaging apparatus comprising: an image pickup device having an imaging area in which a plurality of light receiving elements are two-dimensionally placed (Figure 2, Items 11); and a controller (Figure 42, Item 96) having a first mode adapted to output picture data from a first area in the imaging area

(Paragraph 0063, normal imaging mode), a second control mode adapted to output the picture data by using the signal from a second area smaller than the first area

(Paragraph 0063; high-speed imaging mode), exerting control so that, in the case of the first control mode the picture is outputted by the signal having mixed the signals of the plurality of the light receiving elements (Paragraphs 0077-0078), and in the case of the second control mode, the picture data is outputted by the signal having mixed the signals of the plurality of light receiving elements less than the number thereof mixed in the case of the first control mode (Paragraphs 0084-0086). However, Hirota does not disclose an optical zoom device or control according to use of the optical zoom device.

Nozaki discloses a camera including an optical zoom (Figure 3, Item 11; c. 5, ll. 32-34) and electronic zoom device (Figure 7; c. 8, ll. 20-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an optical an electronic zoom as taught by Nozaki in the camera of Hirota to allow a user to zoom in/out on a scene to capture a desired image. Nozaki discloses that an area smaller than the full area of the image sensor should be read out when operating an electronic zoom (i.e. not optical zoom; c. 8, ll. 32-37). It is further noted that Nozaki discloses a system wherein the full area is read out when a first scaling factor is set by the zoom unit (i.e. W_o to T_o , optical zoom area, Figure 7) and a second smaller area is read out when a second scaling factor is set by the zoom unit (i.e. electronic zoom region, Figure 7). Therefore, it would be obvious to use the first mode (i.e. normal readout mode) of Hirota when operating an optical zoom device and the

second mode (i.e. high-speed readout mode) of Hirota when operating the electronic zoom device to zoom in on a scene.

[claim 15]

Regarding claim 15, Hirota discloses a third control mode adapted to output the picture data by using the signal from a third area smaller than the second area (e.g. Paragraph 0072; setting $n=2$ results in a 25-fold speed increase by reading out a smaller area of the image sensor), the signal having mixed the signals of the plurality of light receiving elements less than the number thereof mixed in the case of the first control mode (e.g. Figure 5; Paragraph 0072). Since Nozaki changes the area used for the photograph to progressively smaller areas as the scaling factor is increased, it would be obvious to use a mode such as the third control mode of Hirota to read out image information from the smaller area.

[claim 16]

Regarding claim 16, note that Nozaki discloses performing the electronic zoom function and thus the picture generating control as claimed in a case where the optical zoom device is on a furthest telescopic side (Figure 7).

[claim 17]

Regarding claim 17, Nozaki discloses a zoom operation device for a user to operate expansion or reduction of the picture data, wherein the control determines the picture generating control method in accordance with the zoom operation device (Figure 1, Items 3 and 4; Figure 7).

[claim 18]

Claim 18 is a method claim corresponding to apparatus claim 14. Therefore, claim 18 is analyzed and rejected as previously discussed with respect to claim 14.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571)272-7310. The examiner can normally be reached on M-F 11-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy J Henn/
Primary Examiner, Art Unit 2622